

SEQUENCE LISTING

Sequence Listing

<110> Berger, et al.

<120> NOVEL CHIMERIC PROTEIN FOR PREVENTION AND TREATMENT OF
HIV INFECTION

<130> 4239-60771

<140>
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<150> PCT/US00/06946
<151> 2000-03-16

<150> 60/124,681
<151> 1999-03-16

<160> 11

<170> PatentIn Ver. 2.1

<210> 1
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: linker peptide

<400> 1'
Gly Gly Gly Gly Ser
1 5

<210> 2
<211> 35
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: seven repeat
polypeptide linker

<400> 2
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15
Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
20 25 30
Gly Gly Ser
35

<210> 3
<211> 508

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: CD4-scFv(17b)

<400> 3

Met Asn Arg Gly Val Pro Phe Arg His Leu Leu Leu Val Leu Gln Leu
1 5 10 15
Ala Leu Leu Pro Ala Ala Thr Gln Gly Lys Lys Val Val Leu Gly Lys
20 25 30
Lys Gly Asp Thr Val Glu Leu Thr Cys Thr Ala Ser Gln Lys Lys Ser
35 40 45
Ile Gln Phe His Trp Lys Asn Ser Asn Gln Ile Lys Ile Leu Gly Asn
50 55 60
Gln Gly Ser Phe Leu Thr Lys Gly Pro Ser Lys Leu Asn Asp Arg Ala
65 70 75 80
Asp Ser Arg Arg Ser Leu Trp Asp Gln Gly Asn Phe Pro Leu Ile Ile
85 90 95
Lys Asn Leu Lys Ile Glu Asp Ser Asp Thr Tyr Ile Cys Glu Val Glu
100 105 110
Asp Gln Lys Glu Glu Val Gln Leu Leu Val Phe Gly Leu Thr Ala Asn
115 120 125
Ser Asp Thr His Leu Leu Gln Gly Gln Ser Leu Thr Leu Thr Leu Glu
130 135 140
Ser Pro Pro Gly Ser Ser Pro Ser Val Gln Cys Arg Ser Pro Arg Gly
145 150 155 160
Lys Asn Ile Gln Gly Gly Lys Thr Leu Ser Val Ser Gln Leu Glu Leu
165 170 175
Gln Asp Ser Gly Thr Trp Thr Cys Thr Val Leu Gln Asn Gln Lys Lys
180 185 190
Val Glu Phe Lys Ile Asp Ile Val Val Leu Ala Phe Gln Lys Ala Ser
195 200 205
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
210 215 220
Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
225 230 235 240
Gly Gly Ser Gln Val Gln Leu Leu Glu Ser Gly Ala Glu Val Lys Lys
245 250 255
Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Asp Thr Phe
260 265 270

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Ile Arg Tyr Ser Phe Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
275 280 285

Glu Trp Met Gly Arg Ile Ile Thr Ile Leu Asp Val Ala His Tyr Ala
290 295 300

Pro His Leu Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser
305 310 315 320

Thr Val Tyr Leu Glu Leu Arg Asn Leu Arg Ser Asp Asp Thr Ala Val
325 330 335

Tyr Phe Cys Ala Gly Val Tyr Glu Gly Glu Ala Asp Glu Gly Glu Tyr
340 345 350

Asp Asn Asn Gly Phe Leu Lys His Trp Gly Gln Gly Thr Leu Val Thr
355 360 365

Val Thr Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
370 375 380

Gly Ser Glu Leu Glu Leu Thr Gln Ser Pro Ala Thr Leu Ser Val Ser
385 390 395 400

Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Glu Ser Val Ser
405 410 415

Ser Asp Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu
420 425 430

Leu Ile Tyr Gly Ala Ser Thr Arg Ala Thr Gly Val Pro Ala Arg Phe
435 440 445

Ser Gly Ser Gly Ser Gly Ala Glu Phe Thr Leu Thr Ile Ser Ser Leu
450 455 460

Gln Ser Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Trp
465 470 475 480

Pro Pro Arg Tyr Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Leu
485 490 495

Val Pro Arg Gly Ser Gly His His His His His His
500 505

<210> 4

<211> 1440

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: CD4-scFv(17b)

<400> 4

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0036150100

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tgtacagctt cccagaagaa gagcatacaa ttccactgga aaaactccaa ccagataaag 180
attctgggaa atcaggggctc cttcttaact aaagggtccat ccaagctgaa tgatcgcgct 240
gactcaagaa gaagcctttg ggaccaagga aacttcccc tgatcatcaa gaatcttaag 300
atagaagact cagatactta catctgtgaa gtggaggacc agaaggagga ggtgcaattg 360
ctagtgttcg gattgactgc caactctgac acccacctgc ttcaggggca gagcctgacc 420
ctgaccttgg agagccccc tggtagtagc ccctcagtcg aatgtaggag tccaaggggt 480
aaaaacatac agggggggaa gaccctctcc gtgtctcagc tggagctcca ggatagtggc 540
acctggacat gcaactgtct gcagaaccag aagaagggtg agttcaaaat agacatcgtg 600
gtgctagctt tccagaaggc ctccggaggt ggcggtagtg ggggaggcgg ttcaggcgga 660
ggtggatccg gtggcgagg gtccggcggg ggtggaagcg ggggtggcgg ctccggaggc 720
ggaggttcac aggtgcagct gctcgagtct ggggctgagg tgaagaagcc tgggtcctcg 780
gtgaaggtct cctgcaaggc ctctggagac accttcacga gatatagttt tacctgggtg 840
cgacaggccc ctggacaagg ccttgagtgg atgggaagga tcatcactat ccttgatgta 900
gcacactacg caccgcacct ccagggcaga gtcacgatta ccgcggacaa gtccacgagc 960
acagtctacc tggagctgcg gaatctaaga tctgacgata cggccgtata tttctgtgcg 1020
ggagtgtacg agggagaggc ggacgagggg gaatatgata ataatgggtt tctgaaacat 1080
tggggccagg gaacctgtgt caccgtcacc tcagggtgag gtggctccgg aggtggtggg 1140
agcgggtggc gcgatctga actcgagtgt acgcagtcct cagccaccct gtctgtgtct 1200
ccaggggaaa gagccaccct ctctgcagg gccagtgaga gtgttagtag cgacttagcc 1260
tggtagcagc agaaacctgg ccaggctccc aggctctca tatatgggtg atccaccagg 1320
gccaccggtg tcccagccag gttcagtggt agtgggtctg gggcagaatt cactctcacc 1380
atcagcagcc tgcagtctga agattttgca gtttattact gtcagcagta caataactgg 1440
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<210> 5
<211> 127
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
        oligonucleotide
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<400> 5
cctccggagg tggcggtagt gggggaggcg gttcaggcgg aggtggatcc ggaggcggag 60
ggtcgggcgg ggggtggaagc ggggtggcgg gctctggtgg cggaggtacc actagttaag 120
tgagtag                                         127
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<210> 6
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide
        encoded by SEQ ID NO: 5
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<400> 6
Ala Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
  1           5           10          15

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
  20           25           30

Gly Gly Gly Gly Thr Thr Ser
```

<210> 7
 <211> 103
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: primer

<400> 7
 ttttatggat ccggtggcgg agggtcgggc gggggtggaa gcgggggtgg cggctccgga 60
 ggcgagggtt cacaggtgca gctgctcgag tctggggctg agg 103

<210> 8
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: peptide
 encoded for by SEQ ID NO: 7

<400> 8
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
 1 5 10 15
 Ser Gly Gly Gly Gly Ser Gln Val Gln Leu Leu Glu Ser Gly Ala Glu
 20 25 30

<210> 9
 <211> 65
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: primer

<400> 9
 taatttatcg atcacgtgac tagtcctagg cccgggtcaa tgatgatgat gatgatggcc 60
 gctgc 65

<210> 10
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: peptide
 encoded for by SEQ ID NO: 9

<400> 10
Ser Gly His His His His His His
1 5

<210> 11
<211> 131
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: reverse
oligonucleotide

<400> 11
ctagctactc acttaactag tggtagctcc gccacctgag ccgccacccc cgcttccacc 60
ccccgccga cctccgcct ccgatccac ctccgcctga accgcctccc cactaccgcc 120
acctccggag g 131

131
120
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